

CLAIM AMENDMENTS

Please amend Claims 33, and 38 as follows.

1. - 7. (Cancelled)

8. (Previously Presented) The semiconductor device according to claim 33, wherein a power supply voltage of said correction circuit output chip is higher than a power supply voltage of said photo sensor chips.

9. (Cancelled)

10. (Cancelled)

11. (Previously Presented) The semiconductor device according to claim 33, wherein GND wiring for said correction circuit output chip and GND wiring for said photo sensor chips are isolated from each other on said single mounting substrate.

12. (Cancelled)

13. (Cancelled)

14. (Previously Presented) The semiconductor device according to claim 8, wherein GND wiring for said correction circuit output chip and GND wiring for said photo sensor chips are isolated from each other on said single mounting substrate.

15-32. (Cancelled)

33. (Currently Amended) An image sensor comprising:

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a plurality of photo sensor chips mounted on a single mounting substrate, each photo sensor chip having a plurality of photo-electric conversion circuits, a common output line through which signals from said plurality of photo-electric conversion circuits are outputted, and a photo sensor chip output device which outputs signals from said common output line to outside of said photo sensor chip, wherein each said photo-electric conversion circuit has a photo-electric conversion part and an amplifier for amplifying an output signal from the photo-electric conversion part; and

a correction circuit output chip mounted on said single mounting substrate, said correction circuit output chip having a noise compensation circuit which receives a noise signal ~~and a photo-electric conversion signal from said photo-electric conversion circuits and which compensates for a noise component included in a said photo-electric conversion signal by using the noise signal from the photo-electric conversion~~ circuit outputted from the amplifier and including an offset component of the amplifier, the noise signal being obtained by resetting an input portion of the amplifier and a photo-electric conversion signal generated in said photo-electric conversion part, wherein said noise compensation circuit corrects a noise component of the photo-electric conversion signal by using the noise signal outputted from the amplifier,

wherein said correction circuit output chip is arranged commonly to said plurality of photo sensor chips, and

wherein an output terminal for outputting a signal to outside of said correction circuit output chip and an output terminal for outputting a signal to outside of said single mounting substrate are connected to each other.

34. (Previously Presented) The image sensor according to claim 33, wherein said noise compensation circuit has a differential circuit which calculates a difference between a first signal and a second signal and a clamp circuit connected to an output of said differential circuit.

35. (Previously Presented) The image sensor according to claim 34, wherein said differential circuit calculates a difference between the noise signal and the photo-electric conversion signal read out from said photo sensor chip output device and said clamp circuit clamps a reset state of said common output line in said photo sensor chip.

36. (Previously Presented) The image sensor according to claim 33, wherein said noise compensation circuit has a plurality of clamp circuits that are serially connected.

37. (Previously Presented) The image sensor according to claim 33, wherein said noise compensation circuit has a clamp circuit which clamps a reset state of said common output line in said photo sensor chip.

38. (Currently Amended) A method of driving an image sensor, said image sensor including:

(a) a plurality of photo sensor chips mounted on a single mounting substrate, each photo sensor chip having a plurality of photo-electric conversion circuits, a common output line through which signals from said plurality of photo-electric conversion circuits are outputted, and a photo sensor chip output device which outputs signals from said common output line to outside of said photo sensor chip, wherein each said photo-electric conversion circuit has a photo-electric conversion part and an amplifier for amplifying an output signal from the photo-electric conversion part; and

51
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(b) a correction circuit output chip mounted on said single mounting substrate, said correction circuit output chip having a noise compensation circuit which receives a noise signal ~~and a photo-electric conversion signal from the photo-electric conversion circuits and which compensates for a noise component included in a said photo-electric conversion signal by using the noise signal from the photo-electric conversion~~ ^{PPN} circuits outputted from the amplifier and including an offset component of the amplifier, the noise signal being obtained by resetting an input portion of the amplifier and a photo-electric conversion signal generated in said photo-electric conversion part, wherein said noise compensation circuit corrects a noise component of the photo-electric conversion signal by using the noise signal outputted from the amplifier ,

wherein said correction circuit output chip is arranged commonly to said plurality of photo sensor chips, and

wherein an output terminal for outputting a signal to outside of said correction circuit output chip and an output terminal for outputting a signal to outside of said single mounting substrate are connected to each other,

said method comprising the step of:

driving said compensation circuit to compensate for a noise

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comp* component included in a photo-electric conversion signal read out from said photo sensor chip output device by using a noise signal read out from said photo sensor chip output device.
